

Amendments to the Specification:

Please replace paragraph beginning on page 1, line 5 with the following rewritten paragraph:

-- This application relates to U.S. Patent Ser. No. 09/900,230, filed July 6, 2001, U.S. Patent 6,545,209B1, issued April 8, 2003, U.S. Patent Ser. No. 09/934,071, filed August 20, 2001, U.S. Patent Ser. No. 09/900,059, filed July 6, 2001, U.S. Patent Ser. No. 09/934,774, filed August 21, 2001, U.S. Patent 6,657,117, issued December 2, 2003, U.S. Patent Ser. No. 09/904,465, filed July 13, 2001, U.S. Patent 6,748,395, issued June 8, 2004, U.S. Patent Ser. No. 09/942,509, filed August 29, 2001, and U.S. Patent Ser. No. 09/928,004, filed August 10, 2001 Appln. Nos. (Attorney Docket Nos. MSFT-577 through MSFT-581 and MSFT-583 through MSFT-587).

Please replace paragraph beginning on page 9, line 21 with the following rewritten paragraph:

--One of ordinary skill in the art can appreciate that a computer ~~440~~ 110a, 110b, 110c, 110d or 110e or other client device can be deployed as part of a computer network. In this regard, the present invention pertains to any computer system having any number of memory or storage units, and any number of applications and processes occurring across any number of storage units or volumes. The present invention may apply to an environment with server computers and client computers deployed in a network environment, having remote or local storage. The present invention may also apply to a standalone computing device, having access to appropriate classification data and an appropriate playlist generation engine.--

Please replace paragraph beginning on page 9, line 29 with the following rewritten paragraph:

--Fig. 1 illustrates an exemplary network environment, with a server in communication with client computers via a network, in which the present invention may be employed. As shown, a number of servers 10a, 10b, etc., are interconnected via a communications network 14, which may be a LAN, WAN, intranet, the Internet, etc., with a number of client or remote computing devices 110a, 110b, 110c, 110d, 110e, etc., such as a portable computer, handheld computer, thin client, networked appliance, or other device,

such as a VCR, TV, and the like in accordance with the present invention. It is thus contemplated that the present invention may apply to any computing device in connection with which it is desirable to provide classification services for different types of content such as music, video, other audio, etc. In a network environment in which the communications network 14 is the Internet, for example, the servers ~~10~~ 10a, 10b, etc. can be Web servers with which the clients 110a, 110b, 110c, 110d, 110e, etc. communicate via any of a number of known protocols such as hypertext transfer protocol (HTTP). Communications may be wired or wireless, where appropriate. Client devices ~~110~~ 110a, 110b, 110c, 110d or 110e may or may not communicate via communications network 14, and may have independent communications associated therewith. For example, in the case of a TV or VCR, there may or may not be a networked aspect to the control thereof. Each client computer ~~110~~ 110a, 110b, 110c, 110d or 110e and server computer ~~10~~ 10a, 10b, etc. may be equipped with various application program modules ~~135~~ 135a, 135b, etc. and with connections or access to various types of storage elements or objects, across which files may be stored or to which portion(s) of files may be downloaded or migrated. Any server 10a, 10b, etc. may be responsible for the maintenance and updating of a database 20 in accordance with the present invention, such as a database 20 for storing classification information, music and/or software incident thereto. Thus, the present invention can be utilized in a computer network environment having client computers 110a, 110b, etc. for accessing and interacting with a computer network 14 and server computers 10a, 10b, etc. for interacting with client computers 110a, 110b, etc. and other devices ~~111~~ and database(s) 20.--

Please replace paragraph beginning on page 13, line 11 with the following rewritten paragraph:

--However, once a rule is created, it is not considered a generalized rule. The rule is then tested against like pieces of media, such as song(s), in the database 370. If the rule works for the generalization song(s) 370, the rule is considered generalized. The rule is then subjected to groover scrutiny 380 to determine if it is an accurate rule at 385. If the rule is inaccurate according to groover scrutiny, the rule is adjusted. If the rule is considered to be accurate, then the rule is kept at 390 as a relational rule e.g., that may classify new media.--

Please replace paragraph beginning on page 13, line 28 with the following rewritten paragraph:

-- The operation of the classification chain is broken down into two phases: classification and operation. Human experts undertake the classification phase. U.S. Patent Appln. No. ~~[Attorney Docket No. MSFT-0581]~~ 09/934,774 describes a system and method for training and certifying trainees to be groovers, or experts qualified to classify data. These experts, who may be first-rate music classification experts for maximum consistency, or groovers who have been trained by those experts, assign each media entity in the data set to one or more classes. Each class corresponds to a given subset of perceptual properties of the data. The classified data is then used to construct an initial classification chain.--

Please replace paragraph beginning on page 18, line 22 with the following rewritten paragraph:

--Fig. 6C illustrates an exemplary flow diagram whereby the classification chain input space is trained, and "tweaked" over time for improved classification. This process could be performed for a single property, such as tempo, or for a plurality of properties up to the total number of classes and subclasses for the media entity. Having an initial classification chain with which to work as a result of human expert classification of songs, an exemplary fine tuning process utilizing a plurality of unclassified media entities may proceed as follows: At start 600, a first unclassified song is presented. If, at 605, it is determined via a fingerprint or other identification means that the song or portion of the song is already in the database, such as database 240, then the flow proceeds to 610. If at 610, training is complete either because an expert determines that the classification chain is working with threshold accuracy or because the last of the plurality of unclassified songs has been processed, then the process ends at 625. If training is not complete, the next song is presented at 615 and the flow returns to 605. If at 605, it is determined that the song has not yet been entered into the data set or previously classified, a song vector is calculated for the desired properties of the song at 620, and the vector is presented to the classification chain. The classification chain returns a response at 630 i.e., the classification chain returns a class estimate for the input vector and a degree of confidence for the estimate. If there is a high level of confidence for the classification chain's ability to classify the song, as determined at 635, there is no need to

tweak the classification chain because it worked for its intended purpose, and the next song of the plurality of unclassified songs at 645 is ready to be processed and the process begins again at 605. If the degree of confidence for the classification is low or if an expert determines that there is otherwise a problem with the classification of the song, then the flow proceeds to 640 where the expert assigns values to the song, and then adds the newly classified song to the classification chain for future classifications. In this case, in the future, when an unclassified song is input to the classification chain that is similar to the song classified by the expert at 640, the classification chain will produce a better response than the previous response because it has been further trained to recognize songs of that character.--

Please replace paragraph beginning on page 26, line 3 with the following rewritten paragraph:

--Thus, this determination is repeated for each bin in the difference frame until the last bin is reached at 830, at which point all peaks in the FFT frame have been identified. At 834 the number of requested peaks are identified. Then, at 836, another loop is set to run from 1 to the number of peaks requested. At 838, an Nth order interpolation of the peaks' positions and heights is performed to increase the accuracy of these values until the number of peaks requested is reached at 840. When all of the peaks for the number of peaks requested have been Nth order interpolated, the processing for the next frame begins at 842 until all of the frames have been processed, finishing at 844.--